

Applicant : Jack Moore
Serial No. : 10/665,596
Filed : September 19, 2003
Page : 8 of 12

Attorney's Docket No.: 04408-004001



REMARKS

Claims 1-40 were pending. Claims 1-26 and 28-40 are rejected. Claim 27 is objected to as dependent upon a rejected base claim. Claims 1, 4, 5, 8, 9, 15-17, 23, 27, and 30 are amended and claims 3, 6, 7, 13, 21, 22 and 31-40 are canceled. Examination of claims 1, 2, 4, 5, 8-12, 14-20, and 23-30 is requested in light of the amendments and the remarks below.

Claim Rejections – 35 U.S.C. §112

Claim 9 is amended to provide proper antecedent basis for the limitations in the claim. Claims 13, 15, and 23-29 are rejected as indefinite for containing a trademark. Claims 13 has been canceled and claims 15 and 23 have been amended to delete the trademark. Claims 34-40 are rejected as indefinite. Claims 34-40 have been canceled. Applicant requests the rejections with respect to claims 9, 15, and 23-29 be withdrawn.

Claim Rejections – 35 U.S.C. §102

Under 35 U.S.C. §102(b), claim 21 is rejected as anticipated by U.S. Patent No. 6,412,579 (Fielder) and claims 21, 30, 33-34, and 37-40 are rejected as anticipated by U.S. Patent No. 5,158,393 (Bossler). Claims 21 and 31-40 are canceled, rendering the objections thereto moot.

Claim 30 recites drilling a two-diameter hole using a drill bit that includes “a primary cutting surface substantially located on a closed face of a first portion at a distal end of a body of the drill bit forming a portion of the hole defined by the first diameter and a secondary cutting surface substantially located on an intermediate ring extending radially outward circumferentially about a second portion of the body of the drill bit forming a portion of the hole defined by the second diameter in one step.” Bossler does not disclose drilling a two diameter hole using such a drill bit. Applicant respectfully requests that this rejection be withdrawn.

Claim Rejections – 35 U.S.C. §103

Bossler in view of Alsup

Claims 1, 2, 12, 13-15, 19, 22, 31, 32, 35, and 36 are rejected under 35 U.S.C. §103(a) as obvious over Bossler in view of U.S. Patent No. 2,475,812 (Alsup). Applicants traverse these rejections as they apply to claims 1, 2, 12, 13-15, and 19.

Claim 1 recites a drill bit including a body comprising “a first portion adjacent to [a] proximal end and a second portion adjacent to [a] distal end wherein the portions are substantially cylindrical and a first outer diameter of the first portion is greater than a second outer diameter of the second portion.” Claim 14, depending from claim 1, further recites “a pilot drill extending axially from the distal end of the body, thus distinguishing the body from an associated pilot drill.”

Accordingly, the drill bit of the instant invention permits drilling a core hole of predetermined and adjustable depth and a diameter with a surrounding reamed seat of relatively greater diameter in a single step for receiving a highway reflector flush with the pavement surface, for example (see specification, p. 5, lines 12-17; p. 8, line 1 – p. 10, line 4). In contrast, Bossler discloses a drill bit 10 with a larger diameter forward body portion 14 and an integral, *relatively smaller diameter* rear body portion 16 (col. 4, lines 54-65; FIGS. 1 and 6). Small core drill bit 28 is part of “a pilot means” that is attached to the forward body portion 14 to maintain the lateral position of the drill bit during operation (abstract; col. 6, lines 27-48; col. 7, lines 37-40; FIGS. 4 and 6). Small core drill bit 28 is a pilot drill rather than a portion of the drill bit body. Thus, Bossler does not teach or suggest a body including “a first portion adjacent to [a] proximal end and a second portion adjacent to [a] distal end wherein the portions are substantially cylindrical and a first outer diameter of the first portion is greater than a second outer diameter of the second portion.”

Alsup discloses an attachment for a drill bit and appears to be cited for its teaching of a depth stop adjustably secured by a plurality of adjusting screws. However, Alsup does not cure the deficiencies of Bossler as discussed above, and, specifically, fails to disclose “a first portion adjacent to [a] proximal end and a second portion adjacent to [a] distal end wherein the portions

are substantially cylindrical and a first outer diameter of the first portion is greater than a second outer diameter of the second portion" as recited in claim 1, as amended.

Applicant requests these rejections be withdrawn as they apply to claims 1, 2, 12, 13-15, and 19. Claims 22, 31, 32, 35, and 36 have been canceled rendering the rejections thereto moot.

Bossler in view of Miller

Claims 31, 32, 35, and 36 are rejected under 35 U.S.C. §103(a) as obvious over Bossler in view of U.S. Patent No. 2,996,061 (Miller). Claims 31, 32, 35, and 36. have been canceled rendering the rejections thereto moot.

Bossler in view of Alsup in further view of Barron

Claims 3-10, 23, 24, and 27-29 are rejected under 35 U.S.C. §103(a) as obvious over Bossler in view of Alsup in further view of U.S. Patent No. 2,978,846 (Barron). The introductory paragraph of item number 8 of the Office Action indicates that claim 27 was included in this rejection. However, this appears to be inadvertent as claim 27 is not included in the supporting discussion and item number 11 of the Office Action indicates claim 27 covers allowable subject matter. Applicant traverses this rejection as it applies to claims 3-10, 23, 24, and 28-29.

Claims 4-10 depend directly or indirectly from independent claim 1. Claim 1 recites an intermediate ring extending radially outward circumferentially about the second portion and a secondary cutting surface substantially located on the intermediate ring. Neither Bossler nor Alsup discloses or suggests such an intermediate ring bearing a secondary cutting surface. Barron does not remedy this deficiency. Barron does disclose a secondary cutting surface 18 located on a cylindrical enlargement 17 that is between the pilot drill (guide rod 12) and drill shank 11 (col. 1, lines 52-70; FIGS. 3 and 5). However, cylindrical enlargement 17 is structurally similar to the first portion of a drill bit body as claimed by Applicant rather than extending from the second portion of such a drill bit body.

Claim 27 is objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. As amended, independent claim 23 incorporates all the limitations of claim 27. Applicant respectfully submits that claim 23 is allowable. Claims 24-26, 28, and 29 depend from claim 23 and are allowable for at least the same reasons. Applicant rewrites claim 27 in independent form to include most of the limitations of the original claim 27 (rewritten as amended claim 23) which was indicated as allowable over the references made of record. Applicant respectfully submits that claim 27 is patentable for at least the same reasons as claim 23. Applicant respectfully requests that these rejections be withdrawn for at least the reasons discussed above.

Bossler in view of Alsup in further view of Barron and in further view of Miller

Claims 11, 25, and 26 are rejected under 35 U.S.C. §103(a) as obvious over Bossler in view of Alsup and in further view of Barron and further view of Miller. Miller was cited for its disclosure of a core drill having a diamond impregnated matrix and delivering a cooling agent along the interior of the drill shank to the cutting surfaces. With respect to claim 11, Miller does not cure the deficiencies of the other cited references as discussed above. Similarly, claims 25 and 26 depend from claim 23 which has been amended to recite the subject matter that was indicated to be allowable. Therefore, Applicant respectfully requests that these rejections be withdrawn.

Conclusions

Applicant respectfully request that all claims be allowed or, if the Examiner maintains one or more of the rejections, Applicant requests a telephone interview to expedite the prosecution of this application.

Applicant : Jack Moore
Serial No. : 10/665,596
Filed : September 19, 2003
Page : 12 of 12

Attorney's Docket No.: 04408-004001

No fees are believed to be due, however, please apply any charges or credits to deposit account 06-1050, referencing the attorney docket number above.

Respectfully submitted,

Date: 9/4/03

S. M. Dean
Sean M. Dean, Ph.D.
Reg. No. 46,656

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

21164172.doc